

BARTLETT

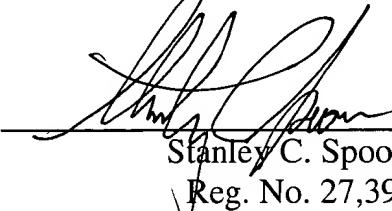
National Phase of Intl Appln. No. PCT/GB00/00729

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page/s is/are captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: 

Stanley C. Spooner

Reg. No. 27,393

SCS:tat

1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

3. (Amended) A head tracker according to Claim 1 [or Claim 2] in which the, or each, distinguishable marking (18a-18j) comprises a spatial pattern.

4. (Amended) A head tracker system according to [any preceding claim] Claim 1 in which the, or each, distinguishable marking (18a-18j) is defined in part at least by the colour of the marking.

5. (Amended) A head tracker system according to [any preceding claim] Claim 1 and further comprising one or more marking generators (18a-18j) for generating the distinguishable markings.

7. (Amended) A head tracker according to [any preceding claim] Claim 1 in which each marking is a substantially collimated image having an axis (20a-20j) which is predetermined and which passes through said respective known fixed point.

8. (Amended) A head tracker system according to Claim 1 [or any one of Claims 3 to 7 when dependent on Claim 1] in which the plurality of markings comprises features of the environment around the user.

9. (Amended) A head tracker system according to [any preceding claim]

Claim 1 in which the optical correlator (26) is operable to sequentially, optically correlate the optical image from the optical sensor with an optical image representative of each of the markings.

10. (Amended) A head tracker system according to [any preceding claim]

Claim 1 in which the means (28) for determining the orientation of the head mounting (2) determines the head mounting orientation by determining where within the field of view of the optical sensor a marking is located.

11. (Amended) A head tracker system according to [any preceding claim]

Claim 1 in which the optical sensor (12) comprises a video camera for capturing the optical image and producing an electrical signal representative of it and converting the electrical signal back to an optical image.

12. (Amended) A head tracker system according to [any preceding claim]

Claim 1 and further comprising a second optical sensor located at a second known fixed point relative to the head mounting or to the fixed datum.

13. (Amended) A head tracker system according to [any preceding claim]

Claim 1 in which the optical correlator (26) is a Vander Lugt type correlator.

14. (Amended) A head tracker system according to [any one of Claims 1 to 12] Claim 1 in which the optical correlator (28) is of the joint transform type.

17. (Amended) A head tracker system according to Claim 15 [or Claim 16] and further comprising providing one or more visibly distinguishable markings (18a- 18j) at respective known points which are fixed relative to the datum (22).